

REMARKS

The Examiner states that restriction of the pending claims to one of the following nineteen groups is required under 35 U.S.C. § 121:

- I. Claims 1, drawn to methods of producing a xenogeneic immunoglobulin by immunizing a transgenic non-human animal capable of producing a xenogeneic immunoglobulin, classified in class 800, subclass 6.
- II. Claims 11, an immortalized non-human cell line comprising a xenogeneic immunoglobulin loci, classified in class 435, subclass 326.
- III. Claim 14, drawn to methods of making a xenogeneic immunoglobulin by culturing an immortalized cell line, classified in class 435, subclass 70.21.
- IV. Claims 15 and 70, drawn to a xenogeneic immunoglobulin, classified in class 530, subclass 387.1.
- V. Claims 16, 34, 68, 72 and 75, drawn to genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin heavy chains, classified in class 800, subclass 13.
- VI. Claims 16, 34, 68, 72, and 75, drawn to a genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin light chains, and methods of making the homozygous mammal by breeding, classified in class 800, subclass 13.
- VII. Claims 16, 25, 34, 68, 72, and 75, drawn to a genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin

heavy and light chains, and methods of making the homozygous mammal by breeding, classified in class 800, subclass 13.

- VIII. Claims 16, 34, 68, 72, and 75, drawn to a genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin heavy and light chains, and hemizygous or homozygous for the ability to produce xenogeneic immunoglobulin heavy chains, and methods of making the homozygous mammal by breeding, classified in class 800, subclass 13.
- IX. Claims 16, 34, 68 and 72, and 75, drawn to a genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin heavy and light chains, and hemizygous or homozygous for the ability to produce xenogeneic immunoglobulin light chains, and methods of making the homozygous mammal by breeding, classified in class 800, subclass 13.
- X. Claims 16, 34, 68, 72, and 75, drawn to a genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin heavy and light chains, and hemizygous or homozygous for the ability to produce xenogeneic immunoglobulin light chains, and methods of making the homozygous mammal by breeding, classified in class 800, subclass 13.
- XI. Claims 16, 34, 68, 72, and 75, drawn to a genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin heavy and light chains, and hemizygous or homozygous for the ability to

produce xenogeneic immunoglobulin heavy and light chains, and methods of making the homozygous mammal by breeding, classified in class 800, subclass 13.

- XII. Claims 16, 34, 68, 72, and 75, drawn to a genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin heavy chains, and hemizygous or homozygous for the ability to produce xenogeneic immunoglobulin heavy and light chains, and methods of making the homozygous mammal by breeding, classified in class 800, subclass 13.
- XIII. Claims 16, 34, 68, 72, and 75, drawn to a genetically modified non-human mammal whose genome is heterozygous or homozygous for a modification that results in the inability of a locus to produce endogenous immunoglobulin light chains, and hemizygous or homozygous for the ability to produce xenogeneic immunoglobulin heavy and light chains, and methods of making the homozygous mammal by breeding, classified in class 800, subclass 13.
- XIV. Claims 27 and 60, drawn to a method for producing a modified non-human animal having a xenogeneic DNA segment, or a method of producing a murine embryonic stem cell having a large xenogeneic DNA genomic fragment, classified in classes 800 and 435, subclasses 21 and 455 respectively.
- XV. Claims 34 and 68, drawn to a modified animal having a xenogeneic DNA segment which is not immunoglobulin DNA, classified in class 800, subclass 13.

- XVI. Claims 40, 50, and 54, drawn to an embryonic stem cell comprising a genome comprising a lesion in the endogenous heavy chain loci, classified in class 435, 325.
- XVII. Claims 40, 52, and 54, drawn to an embryonic stem cell comprising a genome comprising a lesions in the endogenous light chain loci, classified in class 435, 325.
- XVIII. Claim 40, drawn to an embryonic stem cell comprising a genome comprising a lesions in the endogenous light chain and heavy chain loci, classified in class 435, 325.
- XIX. Claims 57 and 67, drawn to an embryonic stem cell comprising at least 100 kb of xenogeneic DNA, classified in class 435, 325.


Applicants elect Group XIV (claims 27 and 60) drawn to a method for producing a modified non-human animal having a xenogeneic DNA segment, or a method of producing a murine embryonic stem cell having a large xenogeneic DNA genomic fragment without traverse.

Applicants make this election expressly without waiver of their right to continue to prosecute and to obtain claims to the non-elected subject matter either in this application or by filing divisional or continuing applications claiming priority and benefit from this application.

CONCLUSION

Should the Examiner feel that a telephone conference with applicants' representatives would assist the Examiner, she is invited to telephone the undersigned at anytime. Applicants request favorable consideration of the application and early allowance of the pending claims.

Respectfully submitted,



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